view is presumably largely due to Dr. Wilson's own work, and the opinion now expressed in his book is that the various types of structure assumed for protoplasm by different schools may in reality represent different phases in the functional activity of this substance. So thoroughgoing and complete has been the revision for the new edition that it will form an invaluable aid to every one interested in modern aspects of cytology.

P.

Intracellular Canals in Ganglion Cells. — The system of canals within the protoplasmic substance of ganglion cells, to which Holmgren has recently called attention, has been identified by Bethe[1] in the spinal ganglion cells of the rabbit. That these canals have a wall of their own as contrasted with the protoplasm of the cell in which they lie seems doubtful. They can be traced, however, beyond the limits of the cell, and in such regions show an undoubted wall; but this contains no nuclei, and hence its histological composition is in doubt. No connection between the canals and blood vessels could be demonstrated, the structures in this respect differing from the tubes discovered by Adamkiewicz. The physiological significance of these canals, whether they be lymph spaces or other such structures, is still to be ascertained.

P.

Vertebrate Anatomy. — Professor W. S. Miller[2] has edited and published under one cover four papers on vertebrate anatomy, the work having been done for the most part by students in his laboratory. The first deals with the histology of the lung of Necturus, the second with this animal's vascular system, and the third with its brain. These three contributions are simple descriptive statements of the more obvious facts that they have to deal with, and are not far-reaching in any direction. The fourth paper takes up the question as to whether there are preformed natural openings on the lining of the body cavity of the cat, a question which is answered in the negative. The papers on the whole are not of a high order, and, in fact, it is difficult to justify the publication of the first three. Nor is the editorial work well attended to, as the following sentence

[1] Bethe, A. Einige Bemerkungen über die "intracellulären Kanälchen" der Spinalganglienzellen und die Frage der Ganglienzellenfunction, *Anat. Anzeiger*, Bd. xvii (1900), pp. 304–309.

[2] Miller, W. S. Contributions from the Anatomical Laboratory of the University of Wisconsin, *Bull. Univ. Wis.*, Science Series, vol. ii (1900), pp. 199–245, Pls. III–XV.